

WHAT IS CLAIMED IS:

1. A communication apparatus comprising:

first communication means for connecting to a telephone line and thus performing communications;

5       connecting means for connecting second communication means which connects to the telephone line via said first communication means and thus performing communications;

first switch means for connecting the telephone  
10 line to said first communication means or said second communication means;

first route means for connecting said second communication means to the telephone line via said first switch means;

15       second route means for connecting said second communication means directly to the telephone line;

second switch means for connecting said second communication means to said first route means or said second route means;

20       first hook detecting means connected to said first route means; and

second hook detecting means connected between the telephone line of said second route means and said second switch means.

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2. A communication apparatus according to claim 1, wherein when said second switch means connects

said second communication means to said first route means, said first hook detecting means detects a hook state of said second communication means, and when said second switch means connects said second  
5 communication means to said second route means, said second hook detecting means detects a hook state of said second communication means.

3. A communication apparatus according to claim  
10 1, wherein said first hook detecting means is connected between said first switch means on said first route means and said second switch means.

4. A communication apparatus according to claim  
15 1, wherein said first hook detecting means is connected between the telephone line and said first switch means.

5. A communication apparatus according to claim  
20 1, wherein an off-hook detection current value of said second hook detecting means is smaller than an off-hook detection current value of said first hook detecting means.

25 6. A communication apparatus according to claim 1, wherein said first communication means includes timer determining means for judging, when an output

of said hook detecting means changes, that a hook state changes after a fixed period time since the output has changed.

5           7. A communication apparatus according to claim 1, wherein current rectifying means constructed of four pieces of unidirectional devices, is provided between the telephone line of said second route means and said second switch means.

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          8. A communication apparatus according to claim 1, further comprising means for connecting said second switch means to said first route means when said first switch means is connected to the side of  
15 said first communication means.

          9. A communication apparatus according to claim 1, wherein said second route means includes a third switch means between the telephone line and said  
20 second switch means, and said third switch means is means for connecting and disconnecting said second route means.

          10. A communication apparatus according to  
25 claim 9, wherein said third switch means is set in a second route means connecting state in the case of detecting the hook state of said second communication

means when said second switch means is connected to said second route means.

11. A communication apparatus according to  
5 claim 10, wherein said first switch means is connected to said first communication means, and said third switch means is set in a second route means disconnecting state during an operation of said first communication means.

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12. A communication apparatus according to any one of claims 1 through 11, wherein a MODEM is used for said first communication means, and said second communication means is a telephone set.

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13. A communication apparatus capable of dialing from said communication apparatus in a state where a telephone set is connected and a handset is off-hooked, said communication apparatus comprising:

20 line disconnecting means for disconnecting the handset from a line during dialing; and

hook state detecting means for detecting a hook state of the handset from a line current by connecting the handset to the line in an inter-digit  
25 time of dialing.

14. A communication apparatus according to

claim 13, wherein said hook state detecting means includes stopping means for stopping transmitting a next digit in the case of judging in the inter-digit time that the handset is in an on-hook state.

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15. A communication apparatus according to claim 13, wherein said hook state detecting means includes:

digit transmission delaying means for delaying  
10 the transmission of the next digit in the case of detecting in the inter-digit time that the handset is in the on-hook state;

dial interrupting means for interrupting dialing when the on-hook state consecutively  
15 continues for only an arbitrarily given on-hook determining time; and

dial processing continuing means for continuing the dial processing in the case of returning to the off-hook state before the on-hook determining time  
20 elapses.

16. A communication apparatus according to claim 13, wherein said hook state detecting means is means that does not monitor the hooking in the inter-  
25 digit time from when receiving a communication start instruction onwards in the case of having receiving the communication start instruction from a user.

17. A communication apparatus comprising:

connecting means for connecting a telephone set  
through said communication apparatus;

first switch means for connecting a telephone  
5 line by switching over a communication unit of said  
communication apparatus and said telephone set;

hook detecting means, connected to the  
telephone line without through said first switch  
means, for detecting a hook state of said telephone  
10 set from a current supplied from the telephone line;  
and

second switch means enabling, if said telephone  
set is off-hooked, the current from the telephone  
line to flow to said telephone set and said hook  
15 detecting means,

wherein when dialing is done from said  
communication unit of said communication apparatus,  
said first switch means connects said communication  
unit of said communication apparatus to the telephone  
20 line, and said second switch means disconnects said  
telephone set from the telephone line.

18. A communication apparatus comprising:

connecting means for connecting a telephone set  
25 through said communication apparatus;

first switch means for connecting a telephone  
line by switching over a communication unit of said

communication apparatus and said telephone set;

hook detecting means, connected to the  
telephone line without through said first switch  
means, for detecting a hook state of said telephone  
5 set from a current supplied from the telephone line;  
and

second switch means enabling, if said telephone  
set is off-hooked, the current from the telephone  
line to flow to said telephone set and said hook  
10 detecting means,

wherein when said communication unit of said  
communication apparatus judges whether a call  
received is given from FAX or a telephone, said first  
switch means connects said communication unit of said  
15 communication apparatus to the telephone line, and  
said second switch means connects said telephone set  
to the telephone line.

19. A communication apparatus comprising:  
20 connecting means for connecting a telephone set  
through said communication apparatus;

first switch means for connecting a telephone  
line by switching over a communication unit of said  
communication apparatus and said telephone set;

25 rectifying means for rectifying a line current  
supplied from the telephone line;

hook detecting means, connected to the

telephone line without through said first switch means, for detecting a hook state of said telephone set from a current supplied from the telephone line; and

5       , second switch means enabling, if said telephone set is off-hooked, the current from the telephone line to flow to said telephone set and said hook detecting means,

          wherein said rectifying means, said hook  
10 detecting means and said connecting means are connected in series,

          in a wait state, said first switch means disconnects said communication unit of said communication apparatus from the telephone line, and  
15 said second switch means connects said telephone set to the telephone line through said rectifying means, and

          said telephone set is thereby made not to ring in response to a calling signal from the telephone  
20 line.

20. A communication apparatus according to claim 17, wherein said second switch means disconnects said telephone set from the telephone  
25 line during dialing, and in an inter-digit time during the dialing, said second switch means connects said telephone set to the telephone line, and said



hook detecting means detects a hook state.

21. A communication apparatus according to  
claim 20, wherein when said hook detecting means  
5 detects an on-hook of said telephone set, the dialing  
is stopped.

22. A communication apparatus according to  
claim 17, wherein said second switch means is  
10 connected closer to the telephone line than said  
first switch means.

23. A communication apparatus according to  
claim 17, further comprising:  
15 second hook detecting means, connected to the  
telephone line through said first switch means, for  
detecting the hook state of said telephone set from a  
current supplied from the telephone line; and

third switch means enabling the current from  
20 the telephone line to flow to said telephone set and  
said second hook detecting means when said telephone  
set is off-hooked,

wherein in a ringing wait state in which said  
telephone set is made to ring in response to a call  
25 receiving signal, said first switch means disconnects  
said communication unit of said communication  
apparatus from the telephone line, said second switch

means disconnects said telephone set from the  
telephone line, said third switch means connects said  
telephone set to the telephone line, and said  
telephone set is made to ring in response to a  
5 calling signal from the telephone line.

24. A communication apparatus according to  
claim 17, wherein in a state of using the line for  
communications, said first switch means connects said  
10 communication apparatus to the telephone line, and  
said second switch means disconnects said telephone  
set from the telephone line.

25. A communication apparatus according to  
15 claim 24, wherein when the communications are  
finished, said second switch means connects said  
telephone set to the telephone line, and said hook  
detecting means detects the hook state of said  
telephone set.

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26. A communication apparatus comprising:  
connecting means for connecting a telephone set  
through said communication apparatus;  
first switch means for connecting a telephone  
25 line, by switching over a communication unit of said  
communication apparatus and said telephone set;  
hook detecting means, connected to the

telephone line without through said first switch means, for detecting a hook state of said telephone set from a current supplied from the telephone line;

second switch means enabling, if said telephone  
5 set is off-hooked, the current from the telephone line to flow to said telephone set and said hook detecting means;

determining means for determining a state of said communication apparatus; and

10 control means for controlling said first switch means and said second switch means in accordance with a result of the determination made by said determining means.

15 27. A communication apparatus according to claim 26, further comprising:

second hook detecting means, connected to the telephone line through said first switch means, for detecting the hook state of said telephone set from a  
20 current supplied from the telephone line; and

third switch means enabling the current from the telephone line to flow to said telephone set and said second hook detecting means when said telephone set is off-hooked,

25 wherein said control means is means for controlling said first switch means, said second switch means and said third switch means in

accordance with the result of the determination made  
by said determining means.